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BRIARCLIFF MANOR, NY 10510

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BERHANE, YOSIEF H

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *1/15/2009*.

2a)☒ This action is FINAL.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *1/15/2009* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-23 have been examined and are pending.

Response to Arguments:

2.   On page 13 of Applicants Response, with regards to independent claim1, 18, 22, and 23,

applicant argues: In contrast to Applicant's independent claims, Satran et al. does not disclose or

suggest the transmitting station transmitting a confirmation message which it received from at

least one receiving station to at least one receiving station of the plurality of first receiving

stations, <u>where the confirmation message relates to a decoding of the data at a respective</u>

<u>receiving station of the plurality of receiving stations,</u>

        The examiner respectfully disagrees with applicants arguments for the following reason.

In regards to Satran et al., the examiner points out that the invention as disclosed by Satran et al.

in Col. 3, lines19-30, relates to a method of transmitting data over a communication network,

which includes multicasting content in a first multicast over a data network from a sender to a

multicast group. The group comprises a plurality of receivers. Each of the receivers detects if

there is a missing portion of the content which was multicast, thereby configuring a means to

send one negative acknowledgement (claimed confirmation message) to the sender. The sender

receives the negative acknowledgement and retransmits the missing content in another multicast

transmission. Note, the negative acknowledgement is sent by one of the plurality of receiving

stations if the receiving station detects that there is a missing portion of the received data,

thereby detecting that the received data is unable to be decoded error-free. Thus, the negative

acknowledgement does relate to the decoding of the data.

Furthermore, Inoue also discloses, on Page 856, section 3.2, that an ACK or a NACK

(claimed confirmation messages) frame is returned to the transmitting station, depending on the

result of reception. Thus, the result of reception, which signifies whether the data can or can not

be decoded properly by the receiving stations, will result in an ACK or a NACK frame being

returned.

On page 12 of Applicants Response, with regards to dependent claims 2-10, applicant

argues that the rejection under 35 U.S.C. §102(b) with respect to Claims 2-10 is improper

because these claims depend from independent Claim 1 and Claim 1 is not similarly rejected

under 35 U.S.C. § 102(b).

The examiner has restructured the claim rejections of 2-10 to be included under 35

U.S.C. §103(a)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
>
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
>
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
>
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
>
> manner in which the invention was made.

3.   **Claims 1-10, 17-18, 22-23** are rejected under 35 U.S.C. 103(a) as being unpatentable

over Non-Patent Literature "Reliable Multicast Protocol with a Representative Acknowledgment

Scheme for Wireless Systems" to Inoue et al. (hereinafter Inoue) and further in view of

Publication 2002/0133615 to Satran et al (hereinafter Satran).

As per claim 1, Inoue teaches a method of performing a point-to-multipoint data

transmission from a transmitting station (BS, fig. 3, page 855, Inoue) to a plurality of first

receiving stations (Station group1, group2 and group3, fig. 3, page 855, Inoue), the method

comprising the steps of (page 856, Inoue discloses where the base station transmits a multicast

data frame destined to all members of the multicast receiver group in the cell):

transmitting data from the transmitting station (BS, fig. 3, page 855, Inoue) to the

plurality of first receiving stations (Station group1, group2 and group3, fig. 3, page 855, Inoue.

Also, page 856, Inoue discloses where the base station transmits a multicast data frame destined

to all members of the multicast receiver group in the cell);

receiving a confirmation message with respect to the data from at least one second

receiving station (Page 856, section 3.2, Inoue discloses that the base station receives a NACK

frame (claimed confirmation message). Note in Fig. 4, Inoue discloses that each group of

receiving stations will be polled, thus a first, second and third receiving stations will receive a

multicast and respond with an ACK or NACK to confirm positive or negate reception of data)

wherein the confirmation message relates to a decoding of the data by the at least one

second receiving station of the plurality of first receiving stations (Page 386, Section 3.2, Inoue

discloses that the polled Representative Station <u>returns an ACK or a NACK frame depending on

its result of reception.</u> Thus, if the data was not received properly, i.e. unable to be decoded

properly, a NACK is sent. Similarly, if the data was received properly, i.e. able to be decoded

properly, an ACK is sent.);

  Inoue is silent on: transmitting the confirmation message from the transmitting station to

at least one third receiving station of the plurality of first receiving stations

  However, Satran discloses where a receiving station sends a confirmation message back

to the transmitting station, at which point the transmitting station immediately multicasts the

confirmation message to the other receiving stations (Abstract, lines 5-8, Satran).

  Therefore it would have been obvious to one of ordinary skill in the art at the time of the

invention, to modify the system of Inoue by incorporating a means for multicasting the

confirmation message to the plurality of first receiving stations as suggested by Satran. The

suggestion for the modification is because transmitting stations need a reliable and efficient

means of acknowledging whether the multicast message has been decoded properly. This

modification would benefit the system of Inoue by ensuring that receiving stations can respond

to multicast messages in an orderly and reliable way.

  As per claim 18, 22 and 23, the combination of Inoue and Satran teach a data

transmission system for a point-to-multipoint data transmission from a transmitting station to a

plurality of first receiving stations (page 856, Inoue discloses where the base station transmits a

multicast data frame destined to all members of the multicast receiver group in the cell)

  wherein the transmitting station (BS, fig. 3, page 855, Inoue) is adapted to transmit data

from the transmitting station to the plurality of first receiving stations (page 856, Inoue discloses

where the base station transmits a multicast data frame destined to all members of the multicast

receiver group in the cell);

wherein each of the plurality of first receiving stations (fig. 3, page 855, Inoue discloses multiple receiving stations)

is adapted to send a confirmation message to the transmitting station (Page 856, section 3.2, Inoue discloses that the receiving stations, which can be a Representative Station, or a Non-Representative station, return a NACK if the data was not received correctly);

wherein the confirmation message relates to a decoding of the data at the respective receiving station of the plurality of first receiving stations (Page 856, section 3.2, Inoue discloses that the receiving stations return a NACK if the data was not received correctly, thereby unable to decode the multicast message properly.);

wherein the transmitting station is adapted to receive a confirmation message with respect to the data (Page 856, section 3.2, Inoue discloses that the base station receives a NACK frame (claimed confirmation message).)

from at least one second receiving station of the plurality of first receiving stations (Fig. 4, Inoue discloses that each group of receiving stations will be polled, thus a first, second and third receiving stations will receive a multicast and respond with an ACK or NACK to confirm positive or negate reception of data);

and wherein the transmitting station is adapted to transmit the confirmation message, which it received from at least one second receiving station, to at least one third receiving station of the plurality of first receiving stations (Satran discloses in Col. 3, lines 19-30, where a receiving station sends a confirmation message back to the transmitting station, at which point the transmitting station immediately multicasts the confirmation message to the other receiving stations. Also see Abstract, lines 5-8, Satran).

As per claim 2, the combination of Inoue and Satran teach the method of claim 1.
Furthermore, Inoue teaches wherein the confirmation message is at least one of a negative
acknowledgement message indicating that the at least one second receiving station
unsuccessfully decoded the data and (Page 856, Inoue discloses where if an NRS (Non-
representative station used to return NACK responses) failed to receive the multicast data frame
correctly, the NRS returns a NACK.)

a positive acknowledgement message indicating that the data was errorlessly decoded at
the at least one second receiving station (Page 856, Inoue discloses where the polled RS returns
an ACK or NACK frame depending on its result of reception).

As per claim 3, Inoue teaches the method of claim 2, wherein, when the confirmation
message is a negative acknowledgement message, the transmitting station retransmits the data
(Page 856, Inoue discloses the case when the base station received a NACK frame, the base
station retransmits the multicast data frame again).

As per claim 4, the combination of Inoue and Satran teach wherein the plurality of first
receiving stations is grouped into a plurality of groups (Station group1, Station group2 and
Station group3, fig. 3, page 855) of first receiving stations such that (Page 855, section 3.1, Inoue
disclose a station must be a member of a station group. The procedure to join or form a station
group is described)

a first group (Station group1, Fig. 3) includes at least one third receiving station (Fig. 3,
station group 1 can have multiple stations) of the plurality of first receiving stations and a second
group (Station group2, fig. 3) includes at least one fourth receiving station (Fig. 3, station group2
can have multiple stations) of the plurality of first receiving stations (Figure 3, on page 855

shows an example of multiple groups of receiving stations which are capable of including any

number of receiving stations to join the multiple groups);

wherein a first feedback phase is assigned to the first group and a second feedback phase

is assigned to the second group in accordance with a feedback scheme (Page 856, fig. 4 discloses

a means of polling which allows each group to signal back to the source at predetermined

intervals of time. **Note that examiner understands feedback phase to be time slots for**

signaling to the base station or other mobile stations. Also, the examiner understands

feedback scheme as means for receiving/sending confirmation messages regarding the

decoding of the multicast data);

wherein the at least one third receiving station (Fig. 3, shows multiple mobile stations in

multiple groups) sends the confirmation message to the transmitting station (Fig. 3, BS) in

accordance with the first feedback phase and the at least one fourth receiving station (Fig. 3,

shows multiple mobile stations in multiple groups) sends the confirmation message in

accordance with the second feedback phase (Page 856, fig. 4 discloses a means of polling which

allows each group to signal back to the source at predetermined intervals of time).

As per claim 5, the combination of Inoue and Satran teach wherein, after the transmitting

station has received and decoded the confirmation message from the at least one third receiving

station of the first group, the transmitting station sends the confirmation message, which it

received from the at least one third receiving station of the first group, to the at least one fourth

receiving station of the second group (page 856, section 3.2, Inoue discloses where the base

station polls the RS of another group after receiving an ACK from the current group. The base

station repeats this operation until it receives an ACK frame from the last group. Note that this

polling frame sent from the base station to another group signals that all the previous groups
have confirmed receiving the multicast message);

wherein the feedback scheme is adapted such that the confirmation message of the at
least one third station of the first group is decoded at the transmitting station and sent to the at
least one fourth receiving station of the second group before the at least one fourth receiving
station sends the confirmation message to the transmitting station (page 856, section 3.2, Inoue
discloses where the base station polls the RS of another group after a certain time, thus a
representative station in a second group will not transmit a confirmation message until it has
been sent a polling frame).

As per claim 6, the combination of Inoue and Satran teach wherein, when the
confirmation message decoded at the at least one fourth receiving station is the negative
acknowledgement message, the at least one fourth receiving station of the second group does not
send its own negative acknowledgement message (Page 856 section 3.2; Inoue discloses where a
station sending a NACK frame must listen to the channel and must quit transmission if another
station sends a NACK frame).

As per claim 7 and 21, the combination of Inoue and Satran teach wherein the at least
one third receiving station and the at least one fourth receiving station only send the confirmation
message in case the decoding of the data of the at least one third receiving station and the at least
one fourth receiving station is unsuccessful such that the at least one third receiving station and
the at least one fourth receiving station only send the negative acknowledgement message
indicating that the data could not be decoded error-free (Page 855, section 3.1.2, Inoue discloses
Non-Representative stations, which only return NACK frames).

As per claim 8, the combination of Inoue and Satran teach wherein, after a retransmission of the data, the transmitting station listens only to third groups of the plurality of groups which have not sent the positive acknowledgement message with respect to the data (This limitation is disclosed in fig. 4 on page 856, section 3.2 by Inoue, whereby the transmitting station only polls one group at a time. In the case where a retransmission is needed, the transmitting station waits to receive an ACK/NACK only from the group that is being polled at the time of retransmission.);

wherein the third groups are considered to have sent the positive acknowledgement message in case all of the receiving stations belonging to the groups have sent the positive acknowledgement message (page 855, section 3.1.2, Inoue discloses that the Representative station is selected from the members of a group. The role of the RS is to return an ACK or a NACK frame for the received multicast datagram when it is polled by the base station).

As per claim 9 and 20, the combination of Inoue and Satran teach wherein the confirmation message is a negative acknowledgement message indicating that the at least one second receiving station could not decode the data error-free (page 856, Inoue discloses where the polled Representative station returns an ACK or NACK frame depending on its result of reception);

And wherein the transmitting station retransmits the data upon reception and decoding of the confirmation message (Page 856, Inoue disclose that when the base station received a NACK frame, it retransmits the multicast data frame again).

As per claim 10, the combination of Inoue and Satran teach wherein the confirmation message is a positive acknowledgement message indicating that the at least one second receiving

station decoded the data error-free (Page 856, section 3.2, Inoue discloses when the frame that

the base station received was an ACK frame and no NACK frame followed, the base station

polls the RS of another group after a certain time);

and wherein the transmitting station retransmits the data after not receiving the

confirmation message from one of the plurality of first receiving stations (Page 856, section 3.2,

Inoue discloses when the base station received a NACK frame, it retransmits the multicast data

frame again).

As per claim 17, the combination of Inoue and Satran teach wherein the data is a data

packet (page 856, Inoue discloses that the polled RS returns an ACK or a NACK frame);

wherein the method is a retransmission protocol in a cellular radio communication system

(Page 856, Inoue discloses that a retransmission control mechanism such as RMTP will be

required to increase reliability of data delivery).

As per claim 19, the combination of Inoue and Satran teach wherein the plurality of first

receiving stations is grouped into a plurality of groups (Station group1, Station group2 and

Station group3, fig. 3, page 855) of first receiving stations such that (Page 855, section 3.1, Inoue

disclose a station must be a member of a station group. The procedure to join or form a station

group is described)

a first group (Station group1, Fig. 3) includes at least one third receiving station (Fig. 3,

station group 1 can have multiple stations) of the plurality of first receiving stations and a second

group (Station group2, fig. 3) includes at least one fourth receiving station (Fig. 3, station group2

can have multiple stations) of the plurality of first receiving stations (Figure 3, on page 855

shows an example of multiple groups of receiving stations which are capable of including any number of receiving stations to join the multiple groups);

wherein a first feedback phase is assigned to the first group and a second feedback phase is assigned to the second group in accordance with a feedback scheme (Page 856, fig. 4 discloses a means of polling which allows each group to signal back to the source at predetermined intervals of time. **Note that examiner understands feedback phase to be time slots for signaling to the base station or other mobile stations. Also, the examiner understands feedback scheme as means for receiving/sending confirmation messages regarding the decoding of the multicast data**);

wherein the at least one third receiving station (Fig. 3, shows multiple mobile stations in multiple groups) sends the confirmation message to the transmitting station (Fig. 3, BS) in accordance with the first feedback phase and the at least one fourth receiving station (Fig. 3, shows multiple mobile stations in multiple groups) sends the confirmation message in accordance with the second feedback phase (Page 856, fig. 4 discloses a means of polling which allows each group to signal back to the source at predetermined intervals of time).

wherein, after the transmitting station has received and decoded the confirmation message from the at least one third receiving station of the first group, the transmitting station sends the confirmation message, which it received from the at least one third receiving station of the first group, to the at least one fourth receiving station of the second group (page 856, section 3.2, Inoue discloses where the base station polls the RS of another group after receiving an ACK from the current group. The base station repeats this operation until it receives an ACK frame

from the last group. Note that this polling frame sent from the base station to another group
signals that all the previous groups have confirmed receiving the multicast message);

wherein the feedback scheme is adapted such that the confirmation message of the at
least one third station of the first group is decoded at the transmitting station and sent to the at
least one fourth receiving station of the second group before the at least one fourth receiving
station sends the confirmation message to the transmitting station (page 856, section 3.2, Inoue
discloses where the base station polls the RS of another group after a certain time, thus a
representative station in a second group will not transmit a confirmation message until it has
been sent a polling frame).

4.   **Claims 11-12, and 15-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over
the combination of Inoue and Satran as applied to claims 1 and 4 above, further in view of
Publication 2003/0207696 to Willenegger et al. (hereinafter Willenegger)

As per claim 11, although the combination of Inoue and Satran teach a method for reliable
multicasting, the reference is silent on wherein the method is applied in the context of
Multimedia Broadcast Multicast Services in UMTS.

However, Willenegger discloses techniques to implement MBMS services in a wireless
communication system that cover various aspects of point-to-multipoint transmissions for
broadcast and multicast services (Paragraph 0008). Willenegger further discloses that the base
station used for multicasting is part of the UMTS Radio Access Network (Paragraph 0023).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the

invention, to modify the combination of Inoue and Satran by incorporating a Multimedia

Broadcast Multicast Services as suggested by Willenegger. The suggestion for the modification

is because new generation networks would like to support the transmission of various types of

data to a wide area of users. This modification would benefit the combination by ensuring that

multicast and broadcast of real-time data to a wide area of users at higher speeds can be reliably

accomplished.

As per claim 12, wherein the confirmation message comprises confirmation data in form

of soft bits, wherein a soft-combining of the confirmation message of the at least one third

receiving station of the first group with the confirmation message of the at least one fourth

receiving station of the second group is performed (Willenegger discloses that MBMS

transmission can be coordinated across multiple cells, which would allow autonomous soft

combining of the MBMS data by the terminal (Paragraph 0137).).

As per claim 15, wherein the confirmation message is transmitted to the transmitting

station from at least one sixth receiving station of the plurality of first receiving stations with a

first transmission power (Willenegger discloses in Paragraph 0202, where an uplink power

control mechanism is implemented to control the transmit power of the uplink transmission)

wherein, when a minimum number of sixth receiving stations transmits the confirmation

message in accordance with a third feedback phase in accordance with a feedback scheme (Page

856, fig. 4, Inoue discloses a means of polling which allows each group to signal back to the

source with an ACK or NACK, at predetermined intervals of time),

resulting in a superposition of confirmation messages and therefore in an increase of power received at the transmitting station, the received power at the transmitting station is sufficient for decoding the superposition of confirmation messages (Willenegger discloses in Paragraph 0202, where an uplink power control mechanism is implemented to control the transmit power of the uplink transmission. Thus, during the uplink data transmission, the transmission power can be increased or decreased to a desired level)

and wherein, when less than a minimum number of sixth receiving stations transmits the confirmation message in accordance with the third feedback phase, the received power at the transmitting station is not sufficient for decoding the superposition of confirmation messages (Willenegger discloses in Paragraph 0202, where an uplink power control mechanism is implemented to control the transmit power of the uplink transmission. Thus, during the uplink data transmission, the transmission power can be increased or decreased to a desired level)

As per claim 16, wherein, after the at least one third receiving station has sent the confirmation message with a second transmission power to the transmitting station in accordance with the first feedback phase, it sends the confirmation message in accordance with the second feedback phase and with a third transmission power; and wherein the third transmission power is higher than the second transmission power (Willenegger discloses in Paragraph 0202, where an uplink power control mechanism is implemented to control the transmit power of the uplink transmission. Thus, during the uplink data transmission, the transmission power can be increased or decreased to a desired level.)

5.   **Claims 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination

of Inoue and Satran as applied to claim 4 above, and further in view Patent 6044069 to Wan.

       As per claim 13, wherein a fifth receiving station of the plurality of first receiving

stations determines a fourth group of the plurality of groups of first receiving stations after

receiving information about the number of groups of the first receiving stations available for

grouping (Page 855, section 3.1.1, Inoues discloses that If there is no other station within the

transmission range of that station, the station sends a request to form a new station group because

that station could find no station groups to join);

       wherein, after determination of the fourth group, the fifth receiving station considers

itself to belong to the fourth group (Page 855, section 3.1.1, Inoue discloses that if there is no

other station within the transmission range of that station, the station sends a request to form a

new station group. Then the station is considered as a station group which comprises one

station);

       Although Inoue teaches the determination of another group by a receiving station, the

reference is silent on wherein the determination of the fourth group to which the fifth receiving

station considers itself to belong to is performed by the fifth receiving station without additional

signaling.

       However Wan teaches a method for registering mobile stations in a cell located in the

same geographic region. Whereby the registration module generates a 6 bit value determined by

a hash function combined with a modulo operation, performed on the TMSI or IMSI value (Wan:

Col. 17, lines 25-30). Thus, additional signaling back to the base station is avoided.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the

invention, to modify the system of Inoue by incorporating a means for determining a group by a

receiver station without a request to the base station as suggested by Wan. The suggestion for the

modification is because additional signaling may require excessive use of available transmission

power. This modification would benefit the system by ensuring the reduction of transmission

power needed to create, determine or join groups for receiving multicast messages.

6.   **Claims 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination

of Inoue, Satran, Wan as applied to claim 13 above and further in view of Willenegger.

As per claim 14, wherein the determination of the fourth group to which the fifth

receiving station is assigned is performed on the basis of at least one of a random number

generated by the fifth receiving station, a modulo operation applied to one of an IMSI and a

TMSI of the fifth receiving station (Col. 17, lines 25-30, Wan discloses where the process of

registering a mobile station includes generating a 6 bit value determined by a hash function

combined with a modulo operation, performed on the TMSI or IMSI value),

and a determined path loss during the data transmission (Willenegger discloses where the

network collects quality information pertaining to data transmission from the end users (UE

terminals) in an MBMS service. This information includes round-trip time, network topology,

and path-loss (Paragraph 0244, Willenegger))

Therefore it would have been obvious to one of ordinary skill in the art at the time of the

invention, to modify the combination of Inoue, Satran and Wan by incorporating a means for

determining a path loss for data transmission as suggested by Willenegger. The suggestion for

the modification is because path loss can dramatically affect the quality of service between

mobile stations and the base station in a multicasting environment. This modification would

benefit the combination of Inoue and Wan by ensuring that a manageable quality of service is

maintained by reporting measurements such as path loss for data transmissions.

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Conclusion

</div>

7.   Prior arts made of record, not relied upon:

US 7,130,282 to Black discloses communication device for providing multimedia in a group

communication network

US 6,996,410 to Bos et al. discloses a method and broadcast multicast service server for data

broadcasting in third generation networks

US 2006/0274780 to Walsh et al. discloses broadcast/multicast service signaling

US 6,959,199 to Ohkubo et al. discloses multicast signal transmission power control method and

base station using the same

US 6,728,226 to Naito discloses multicast message communicating method, multicast message

communicating system, base station thereof and mobile station

US 7,203,512 to Jeong et al. discloses soft combining apparatus and method in a CDMA mobile communication system providing MBMS service

US 5457808 to Osawa et al. discloses a Point-to-multipoint communication network capable of retransmitting a multicast signal

US 20020028687 to Sato et al. discloses a retransmission control method and system for multicast information distribution service, retransmission control apparatus, wireless base station and wireless terminal

US 20030157933 to Watanabe et al. discloses a multicast address allocation apparatus, information distribution apparatus, information distribution system

US 20050002365 to Xu discloses a Systems and methods for acknowledgement of multi-cast traffic

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yosief Berhane whose telephone number is (571) 270-7164. The examiner can normally be reached at 9:00-5:00 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached at 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is. 571-273-8300

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/YOSIEF BERHANE/

Examiner, Art Unit 2419

/Wing F. Chan/

Supervisory Patent Examiner, Art Unit 2419

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